No. 712,512. Patented Nov. 4, 1902.

A. B. ELLIOTT.

ROD PACKING.

(Application filed May 27, 1902.)

(No Model.)

Fig 1

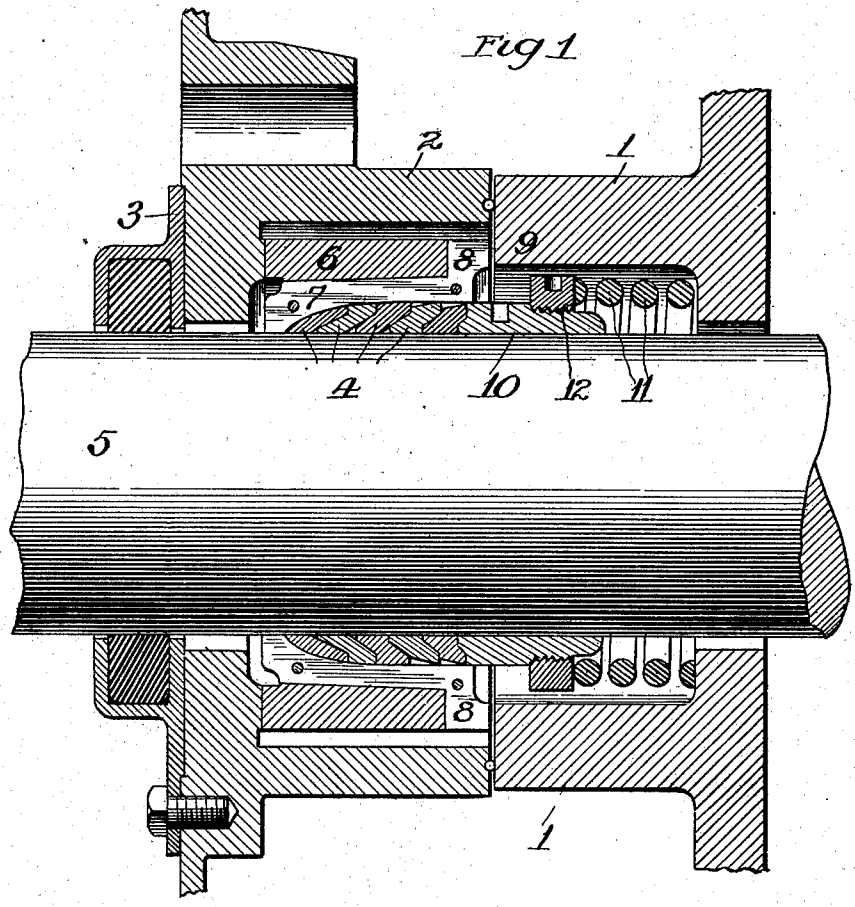
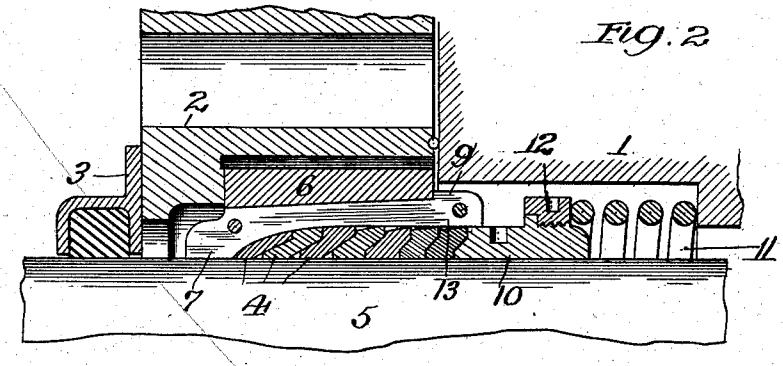


Fig. 2



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UNITED STATES PATENT OFFICE.

ADONIJAH B. ELLIOTT, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO GEORGE C. JEROME, OF CHICAGO, ILLINOIS.

ROD-PACKING.

SPECIFICATION forming part of Letters Patent No. 712,512, dated November 4, 1902.

Application filed May 27, 1902. Serial No. 109,207. (No model.)

To all whom it may concern:

Be it known that I, ADONIJAH B. ELLIOTT, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Rod-Packing, of which the following is a specification.

My invention relates to rod-packing, more particularly piston-rod packing for locomotives and engines generally, and comprises certain improvements in metallic packing of the well-known Jerome type, the advantages of which will be made apparent by the description hereinafter given.

In the drawings, Figure 1 is a section of a rod-packing embodying my invention, and Fig. 2 a section of a portion of a modified form of packing.

The stuffing-box 1, gland 2, secured thereto, and swab-holder 3, secured to the gland, are of ordinary and well-known or desired construction and need not be described in detail here.

The packing proper comprises in the present instance a holder for the packing-rings 4, here shown as of the Jerome type, consisting of a series of nested composition-metal rings embracing the rod 5.

The packing-holder, as shown, consists of an outer ring 6, made in a single piece and seating upon the gland, within which ring is arranged or pressed the case or cone 7, preferably made in two pieces, so as to accommodate modern piston-rods having enlarged hubs and ends. By preference, and as shown, the inner surface of the ring is tapered or inclined, and the outer surface of the cone is likewise inclined to correspond, so as to make a tight fit.

As clearly shown in the drawings, the cone is provided at its right-hand end with a flange 8, adapted to abut the right-hand edge of the ring 6 when the parts are assembled, whereby bursting strain on the ring is overcome or prevented.

The packing-holder is so made and arranged with respect to the stuffing-box, particularly the shoulder 9, as to strike or "gig back," as it is called in practice, against such shoulder, so as to prevent travel of the packing-holder with the rod it packs. Very slight clearance or space is provided, but sufficient to accomdate the usual slight lateral movement of the rod. By the arrangement shown the packing-holder is held properly in place and gigging back prevented. A follower-plate or ring 10 is arranged behind the packing-rings and is spring-pressed by means of a spring 11, bearing against a ring 12, screwing onto the follower, which is made in halves, and thereby held together.

In Fig. 2 I have shown a modified form of construction of the cone which receives the packing arrangement. As clearly shown in this figure, the end 13 of the cone instead of being carried upwardly a comparatively considerable distance, so as to be capable of striking the corner or shoulder 9 of the stuffing-box, lies entirely within the bore of such stuffing-box and does not strike against such shoulder. In other respects the construction is substantially the same as that shown in Fig. 1. The end 13 of the cone is sufficiently raised as to embrace a portion of the end of the outer ring 6.

I claim—

1. A rod-packing comprising in combination with the gland and stuffing-box, a packing-ring holder formed of two sections, one insertible bodily within the other and adapted to have the same limited movement regardless of the wear of the rings and packing-rings arranged within the inner section.

2. A rod-packing comprising, in combination with the gland and stuffing-box, a packing-ring holder arranged between the gland and box and composed of two pieces or sections bodily insertible and removable from each other and a series of spring-pressed packing-rings arranged within the inner section.

3. A rod-packing comprising in combination with the packing-rings and the gland and stuffing-box, a packing-ring holder having a limited play therebetween and composed of two pieces or sections bodily insertible and removable from each other, the packing-rings being arranged within the inner section, and a spring-pressed follower-plate bearing against the packing-rings.

4. A rod-packing comprising, in combination with the packing-rings and the gland and stuffing-box, a packing-ring holder composed

of two sections, one an outer ring or shell and the inner a cone made in two halves insertible bodily in said outer ring, the packing-rings being arranged within the inner section, and a spring-pressed follower-plate bearing against the packing-rings only.

5. A rod-packing comprising, in combination with the packing-rings and the gland and stuffing-box, a packing-ring holder held against movement between the gland and box and composed of two sections bodily insertible and removable into and from each other the packing-rings being arranged within the inner section, and a spring-pressed follower-plate bearing against the packing-rings only.

6. A rod-packing comprising, in combination with the packing-rings and the gland and stuffing-box, a packing-ring holder held against movement between the gland and box and composed of two sections bodily insertible in and removable from each other, said sections having an oblique or inclined joint, and a spring-pressed follower-plate bearing against the packing-rings only.

7. A rod-packing comprising, in combination with the packing-rings and the gland and the stuffing-box having a shoulder 9, a packing-ring holder held against movement by abutment against said shoulder and composed of an outer ring and a case or cone bodily insertible in and removable from said outer ring, said case having a recess to receive the packing-rings.

8. A rod-packing comprising, in combination with the packing-rings and the stuffing-box and the gland, a packing-ring holder composed of an outer ring and a case or cone bodily insertible within the outer ring and having a flange adapted to abut against one edge of said outer ring, the packing-rings being arranged within said case or core.

9. A rod-packing comprising, in combination with the packing-rings and a gland and a stuffing-box having a shoulder 9, and a packing-ring holder composed of an outer ring and a packing-ring case or cone bodily insertible within the outer ring and having a marginal flange abutting against one edge of said outer ring, said flange being adapted to abut said shoulder.

10. A rod-packing comprising packing-rings, and a packing-ring holder composed of an outer ring 6, and a case or cone 7 made in halves and fitting closely within and extending substantially through said ring 6.

11. A rod-packing comprising packing-rings, and a packing-ring holder composed of an outer ring 6 and a case or cone 7 made in halves and fitting closely within and extending through said ring 6, said case 7 having a recess to receive the packing-rings.

12. A rod-packing comprising packing-rings, and a packing-ring holder composed of an outer ring 6 and a case or cone 7 made in halves and fitting closely within and extending through said ring 6, said case 7 having a substantially conical recess to receive the packing-rings.

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